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A NEW TREE SQUIRREL FROM CENTRAL UTAH

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A sufficient number of specimens of the tree squirrel (*Tamiasciurus*) has been collected to reveal the presence of a new variety from the southern Wasatch Mountains of Utah. This form is annectant between two forms heretofore considered species (*T. fremonti* and *T. hudsonicus*) but it has sufficient characters of its own — enough to make it desirable to recognize a new race. Since the name *hudsonicus* has priority, this race, like all others of the *fremonti* group, should be listed as subspecies of *hudsonicus*. It is proposed that this race be known as

***Tamiasciurus hudsonicus wasatchensis*, new subspecies
WASATCH CHICKAREE**

Type.—Male, adult, skin with skull; United States National Museum, Fish and Wildlife Service Collection, no. 276,398; from about 10,000 feet, in spruce-fir area along Skyline Drive east of Mt. Nebo, Juab County near Juab — Utah County line, Utah; August 19, 1942; collected by Ross Hardy; original no 2431 (33443X).

Distribution.—Known from the fir and spruce belts of the southern Wasatch Plateau of Central Utah, including San Pete and Emery Counties as well as the Mt. Nebo area of Utah and Juab Counties. Intergrades northward into *T. h. ventorum* of the northern Wasatch Mountains.

Diagnostic characters.—Dark tail usually with Pinkish-Cinnamon to Ochraceous-Buff tips to hairs; overall color of pelage, especially top of head, with much black; body and cranial measurements medium for western races of the species.

Measurements (in mm.): Type: male, total length, 337; tail vertebrae, 134; hind foot, 51; ear from notch, 26. Skull: basal length, 41.9; palatilar length 22.0; zygomatic breadth, 27.5; cranial breadth 21.5; interorbital breadth, 14.9; breadth at postorbital constriction, 14.7; nasal length, 16.4; maxillary tooth row, 8.2; diastema, 10.9; width of palate between second and third molars, 7.0.

The average and extreme measurements of 11 males and 8 females are, respectively: total length, 328.1 (303-345), 328.1 (324-335); tail, 128.4 (93-141), 131.9 (126-140); foot, 51.1 (49-53), 51.4 (48-54); ear from notch, 27.5 (26-29), 27.1 (25-29). Skull: basal length, 41.4 (40.0-42.0), 41.2 (40.5-42.5); palatilar length, 21.3 (20.0-22.0), 22.2 (21.5-23.2); zygomatic breadth, 27.4 (25.5-29.1), 26.8 (26.0-27.4); cranial breadth, 20.9 (20.2-21.8), 21.1 (20.5-22.0); interorbital breadth, 15.1

(14.4-16.1), 15.2 (14.2-15.7); postorbital constriction, 15.3 (14.6-16.5), 15.1 (14.4-15.7); length of nasals, 15.8 (15.0-16.4), 15.1 (13.4-15.7); length of maxillary tooth row, 8.4 (8.0-8.7), 8.6 (8.0-9.2); diastema, 11.5 (10.9-12.1), 11.4 (10.2-12.0); width of palate between second and third molars, 7.0 (6.3-7.7), 7.0 (6.6-7.8).

Compared with paratypes of *dixiensis* and with *fremonti* from Colorado, the skull of this race averages slightly shorter but has about the same zygomatic breadth.

The width of the palate between the second and third molars averages greater than in any of the races examined.

Compared with *dixiensis*, this race has shorter nasals, but they are not as short as in *ventorum*. The rostrum is shorter than in *dixiensis* or *ventorum* as shown by a shorter diastema. The interorbital width is only slightly wider than in *ventorum*.

Comparisons of pelages: From Colorado and Southern Wyoming specimens of *T. hudsonicus fremonti* in comparable summer pelage, this form differs principally in the tail color, having the hairs tipped with Pinkish-Cinnamon or Ochraceous-Buff (Ridgway 1912). In five of the 19 specimens, many of the hairs are white-tipped but in none is this white "frosting" as extensive as in *dixiensis* or in *fremonti*. The central terminal portion of the tail is black, usually with few if any light tips on the hairs. The tail viewed from the ventral surface is darker than in *fremonti*, having more black and fewer gray hairs. The overall appearance is slightly darker than in *fremonti* because of more black barring on the hairs. The top of the head has more black hairs.

From paratypes of *T. h. dixiensis* from Pine Valley Mts., Utah, this form differs in its darker tail and the "rustier" appearance of the tail and hind feet even in those with white in the tail.

From *T. hudsonicus ventorum* from Rich and Weber Counties, Utah, this form differs in being much darker in overall appearance, with less "rusty" in pelage, including the tail. The terminal portion of the tail is black being more like *T. h. richardsoni* of Oregon whereas the amount of black in the tail of *ventorum* is reduced. The top of the head is darker than in any of the material examined except possibly *dixiensis*.

The greater amount of cinnamon and the reduction of black in the tail of some specimens from 11 miles east of Fairview, which is in San Pete Valley, show that they are closer to *ventorum* than is material from the type locality near Mt. Nebo west of San Pete Valley.

Remarks.—My thanks are given to Paul Newey and Richard D. Porter, students of Weber College, for their help in the collection of material used in this study.

Specimens examined.—UTAH. Total number 19, as follows: *Juab County* east of Mt. Nebo on Scenic Loop Road near Juab — Utah County line at 10,000 feet, 13. *San Pete County* near Skyline Drive 17 miles northeast of Ephraim at 10,300 feet, 3; 11 miles east of Fairview on summit of Wasatch Mts. pass at 8,500 feet, 3.